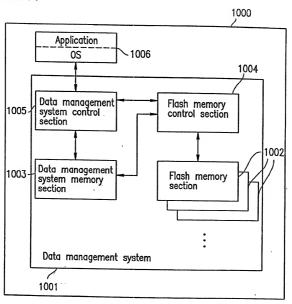
FIG. 1



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# FIG.2

Physical block	,		/	
number	•	Data region		Logical block No. 1
1/2	0	64 kilobytes	ĺ	Logical block No. 2
	1	64 kilobytes	1	Logical block No. 0
1	2	64 kilobytes	1	Logical block No. 4
	3	64 kilobytes	1	Logical block No. 3
	4	64 kilobytes	1	Logical block No. 5
	5	64 kilobytes	1	Logical block No. 6
\	6	64 kilobytes	1,	Logical block No. SP
1	7	64 kilobytes	1/	
	8	64 kilobytes		Logical block No. 7
1	9	64 kilobytes	1	Logical block No. 8
1	10	64 kilobytes	1	Logical block No.12
\.	11	64 kilobytes	1	Logical block No.13
\	12	64 kilobytes	1	Logical block No.14
\	13	64 kilobytes	1	Logical block No.11
\	14	64 kilobytes	1	Logical block No.10
\	15	64 kilobytes	1	Logical block No. 9
	16	64 kilobytes		1 == 3.5 4. 5.6 5. 110. 5
	17	64 kilobytes	1 \	Lariant Mark No. 45
<u> </u>	18	64 kilobytes	1	Logical block No. 15
\	19	64 kilobytes	1	Logical block No. 18
	20	64 kilobytes	1	Logical block No. 19
\	21	64 kilobytes	1	Logical block No. 20
/	22	64 kilobytes	1	Logical block No. 21
\	23	64 kilobytes	1	Logical block No. 22
	20	OT KIIODYLES	_	Logical block No. 17
				Logical block No. 16

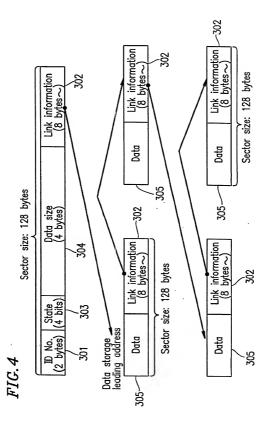
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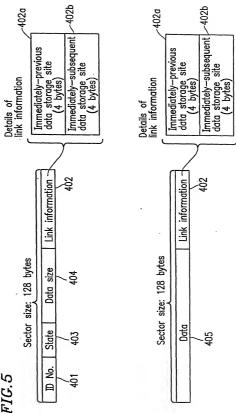
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ID management table

6	Data size	200	•	•	•
	Logical sector number	3	•	•	•
	Logical block number	2		•	•
	ID number	10	•	•	•

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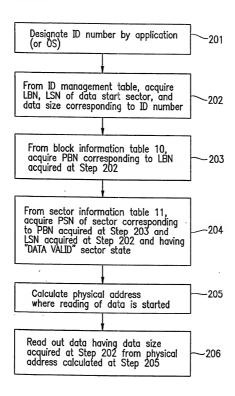


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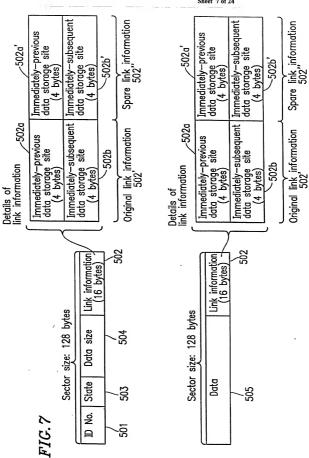
### FIG.6

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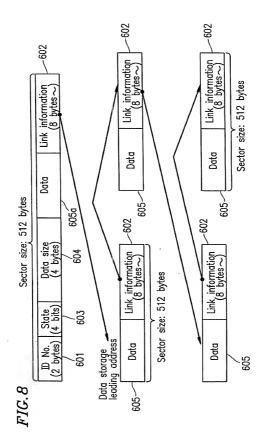


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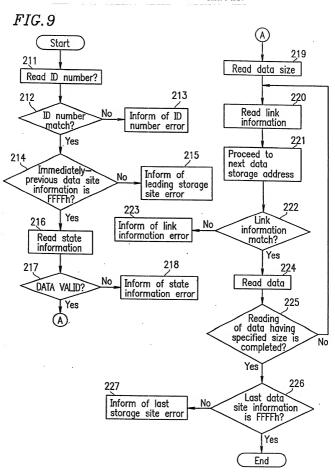


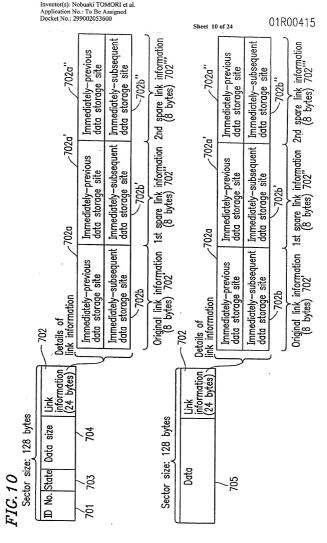


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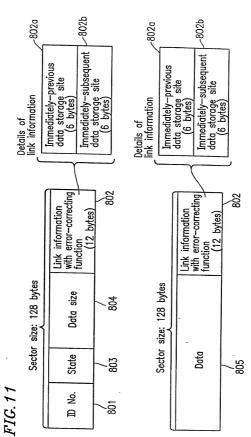


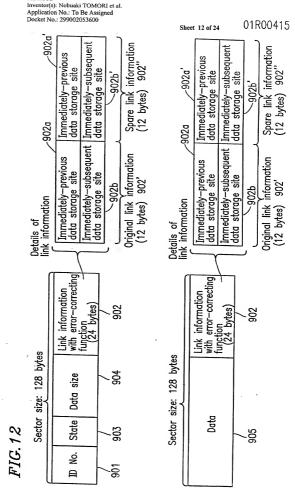




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FIG.13

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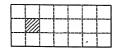
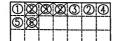


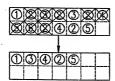
FIG. 14

Address	No.	Flag			
Data					

# FIG.15



# FIG. 16



Title: DATA MANAGEMENT SYSTEM AND DATA MANAGEMENT METHOD

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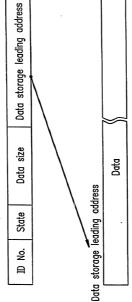
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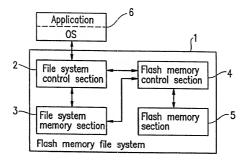


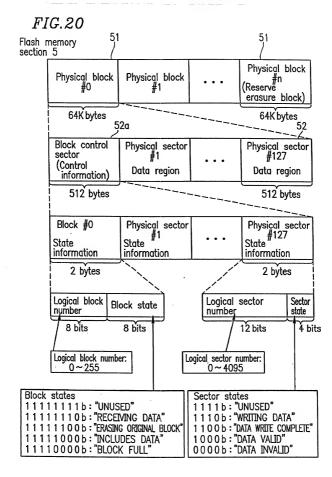
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FIG.19





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FIG.21

Block information table 10

Physical block number (PBN)	Logical block number (LBN)	Block state
0	0	INCLUDES DATA
1	.1	BLOCK FULL
:	:	:

FIG.22

Sector information table 11

Physical block number (PBN)	Physical sector number (PSN)	Logical sector number (LSN)	Sector state
0	1	100	DATA VALID
0	2	10	DATA INVALID
:	:	:	:

FIG.23

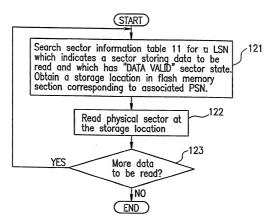
Sector information table 12

Physical block number (PBN)	Number of "UNUSED" sectors	Number of "DATA VALID" sectors	Number of "DATA INVALID" sectors
0	100	20	7
1	0	50	77
. :	:	:	:

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FIG.24

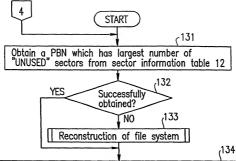


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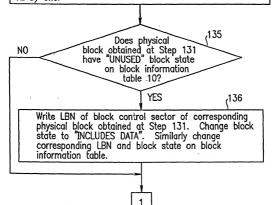
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## FIG.25



From sector information table 11, obtain a PSN which has the "UNUSED" sector state among PSN that correspond to the PBN, obtained at Step 131. Decrement number of "UNUSED" sectors of corresponding PBN on sector information table 12 by one. Increment number of "DATA VALID" sectors of corresponding PBN on sector information table 12 by one.



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FIG.26 137 Number of "UNUSED" sectors of physical block obtained at Step 131 on sector information table 12 = 0? YES 138 Change block state of block control sector of the corresponding physical block obtained at Step 131 to "BLOCK FULL". Similarly change corresponding block state on block information table 10. 139ر Write LSN in corresponding sector state information of block control sector in the physical sector obtained at Step 1.34. Change sector state to "WRITE DATA". Similarly change corresponding LSN and sector state of the physical sector on sector information table 11. ,140 Write data in the physical sector obtained at Step 134. 141 Change sector state of corresponding sector state information of block control sector in the physical sector obtained at Step 134 to "DATA WRITE COMPLETE". Similarly change corresponding sector state of the physical sector on sector information table 11. 142ء NO Is written data update data of existing data? YES

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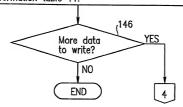


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From sector information table 11, obtain PBN and PSN of a sector which has same LSN as LSN of the sector for which writing was performed at Step 140 but for which writing was not performed at Step 140.

Change sector state of the corresponding sector state information of block control sector in physical sector obtained at Step 143 to "DATA INVALID." Similarly change sector state of the corresponding physical sector on sector information table 11. Decrement number of "DATA VALID" sectors of corresponding PBN on sector information table 12 by 1 and increment number of "DATA INVALID" sectors of corresponding PBN on sector information table 12 by 1.

Change sector state of corresponding sector state information of block control sector in the physical sector obtained at Step 134 to "DATA INVALID". Similarly change corresponding sector state of the physical sector on sector information table 11.

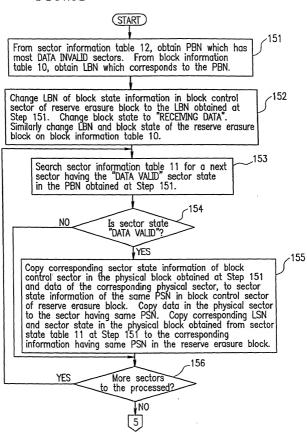


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#### FIG.28



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